COMPILER ANNOTATION FOR BINARY TRANSLATION TOOLS

Fu-Hwa Wang

ABSTRACT OF THE DISCLOSURE

5   An optimizing compiler adds compiler annotation to an executable binary code file. Compiler annotation provides information useful for binary translators such that a binary translator does not have to use a heuristic approach to translate binary code. Compiler annotation identifies such information as function boundaries, split functions, jump table information, function addresses, and code labels. The compiler annotation can be used by a
10   binary translator when translating a source binary code to a target binary code. The target binary code optionally includes new compiler annotation. According to one embodiment of the present invention, an ELF section *.annotate* is generated by an optimizing compiler for each binary code file, aggregated and updated into a single section in the executable binary code by the linker.

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